



RECEIVED

DEC -4 2002

Docket No.: 8733.389.00-US  
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:  
Dug J. Park, et al.

Application No.: 09/788,587

Group Art Unit: 2871

Filed: February 21, 2001

Examiner: Z. Qi

For: METHOD OF FABRICATING LIQUID  
CRYSTAL DISPLAY

**REQUEST FOR RECONSIDERATION**

**Box Non-Fee Amendment**  
Commissioner for Patents  
Washington, DC 20231

Dear Sir:

In response to the Office Action dated September 6, 2002 (Paper No. 5), the following remarks are respectfully submitted in the above-identified U.S. patent application.

**REMARKS**

At the outset, the Examiner is thanked for the thorough consideration given the subject application. Claims 1-18 are currently pending in this application. Reconsideration and reexamination are respectfully requested.

The Examiner objected to the drawings as providing incorrect reference numbers for the gate insulating layer and the gate electrode. Applicants submit herewith a REQUEST FOR APPROVAL OF DRAWING CORRECTION.

The Examiner rejected claims 1, 8, and 9 under 35 USC § 103(a) as being unpatentable over Applicants' Figures 1A-1E in view of Park et al. (US Patent No. 6,022,753). Applicants respectfully traverse this rejection.

Claim 1 is allowable at least for the reason that claim 1 recites a combination of elements including coating a negative-type photoresist on the transparent conductive film and forming an exposed area defining a pixel area at the remaining portion thereof other than a portion corresponding to the data line, the gate line and the thin film transistor area.

Claim 8 is allowable at least for the reason that claim 8 recites a combination of elements including coating the transparent conductive film with a negative-type photoresist; exposing the negative-type photoresist with an image of a pixel electrode, wherein the image of a pixel electrode does not fully extend across the data line and the gate line.

None of the cited references, singly or in combination, teaches or suggests at least these features of the claims.

In contrast, Applicants' Figures 1A-1E disclose coating a positive-type photoresist 29 on the transparent conductive film 27. Further, page 4 of the Specification of this application reads: "Ultraviolet rays are then selectively irradiated onto the photoresist 29 using an exposure

mask 31 having a shielding part 32 and a transparent part 33. At this time, an exposed area 30 is defined in the photoresist 29. The exposed area forms a high polymer state via the light passing through the transparent part 33 of the exposure mask 31. The exposed area 30 is formed in correspondence with the data line 23, the gate line (not shown), and the thin film transistor.”

Applicants respectfully submit that Figures 1A-1E teach away from coating a transparent conductive film with a negative-type photoresist and forming an exposed area...at the remaining portion thereof other than...corresponding the data line, the gate line and the thin film transistor area, and wherein the image of a pixel electrode does not fully extend across the data line and the gate line. In Applicants Figures 1A-1E a positive-type photoresist is coated and the exposed area is formed at a portion in correspondence with the data line, the gate line, and the thin film transistor.

The Examiner cites Park et al. in an attempt to cure the deficiencies of Applicants' Figures 1A-1E. Column 5, lines 1-15 of Park et al. teach "...an ITO layer 800 as a transparent conductive layer and a negative photoresist 1000 which remains when exposed by light are deposited sequentially over the substrate 100. Next, the front exposure that light is irradiated from the front side of the substrate 100 is executed by using the mask having opening pattern over the portions of the negative photoresist 1000 on the pixel region P, the gate pad 220 and the data pad 630. Here, the exposed portions of the negative photoresist 1000 to light are respected as the hatched region in FIGS. 6A, 6B, 6C and 6D. Finally, the hatched portions remain after development, and the ITO layer 800 is etched by using the remaining photoresist as an etch mask to form a pixel electrode 810, a gate pad electrode 820 and a data pad electrode 830 in FIGS. 1.about.4.”

Applicants respectfully submit that Park et al. teaches away from forming an exposed area defining a pixel area at the remaining portion thereof other than a portion corresponding to

the data line, the gate line and the thin film transistor area, and wherein the image of a pixel electrode does not fully extend across the data line and the gate line. In Park et al. the exposed area is formed at a portion in correspondence with the data line, the gate line, and the thin film transistor.

Applicants respectfully submit that the combined teachings would not suggest a modification of a method of fabricating a liquid crystal display device including coating and exposing a negative-type photoresist on a transparent conductive film as recited by claims 1 and 8. Such combination is suggested only by the claimed invention, which is considered impermissible hindsight reconstruction. Applicants respectfully submit that the Examiner has failed to establish a *prima facie* case of obviousness.

Moreover, claim 9 is believed to be allowable by virtue of its dependence on claim 8, which is believed to be allowable.

Applicants respectfully request that the rejection under 35 USC § 103(a) be withdrawn.

The Examiner rejected claims 2-7 and 10-18 under 35 USC § 103(a) as being unpatentable over Applicants' Figures 1A-1E in view of Park et al. (US Patent No. 6,022,753) as applied to claims 1, 8, and 9 above, and further in view of Kumar et al. (US Patent No. 6,077,643). Applicants respectfully traverse this rejection.

As discussed above, the combination of Applicants' Figures 1A-1E and Park et al. fails to teach or suggest a method of fabricating a liquid crystal display device including coating and exposing a negative-type photoresist on a transparent conductive film as recited by claims 1 and 8. Kumar et al. fail to cure the deficiencies of the combination of Applicants' Figures 1A-1E and Park et al.

Applicants respectfully request that the rejection under 35 USC § 103(a) be

withdrawn.

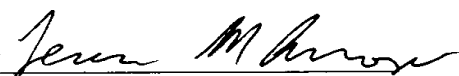
In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue.

If the Examiner deems that a telephone conference would further the prosecution of this application, the Examiner is invited to call the undersigned attorney at (202) 496-7371. All correspondence should be sent to the below-listed address.

If these papers are not timely filed at the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136, and any additional fees required under 37 C.F.R. §1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to deposit Account No. 50-0911.

Dated: December 3, 2002

Respectfully submitted,

By 

Teresa M. Arroyo

Registration No.: 50,015

MCKENNA LONG & ALDRIDGE LLP

1900 K Street, N.W.

Washington, DC 20006

(202) 496-7500

Attorneys for Applicant



30827

PATENT TRADEMARK OFFICE